

A NEW MELANASPIS FROM JAMAICA ON BROMELIAD  
(HOMOPTERA: DIASPIDIDAE)<sup>1, 2</sup>

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ABSTRACT—The adult female of a new species, *Melanaspis jamaicensis*, from Jamaican bromeliads is described and illustrated.

The genus *Melanaspis* Cockerell 1897 was revised by Ferris (1941, 1942, 1943) who described 16 species as new and recorded a total of 31 for North America. Later McKenzie (1944, 1957) described two new species bringing the total known species in North America to 33.

In August 1967, Mr. Suco Nakahara, Plant Quarantine Division, ARS, USDA, Seattle, Washington, sent me specimens of the new species of *Melanaspis* described in this paper. This new species will later be included in a study of *Melanaspis* that is now underway.

*Melanaspis jamaicensis*, n. sp.  
(Figs. 1-4)

FEMALE: Body subcircular in outline; .9 mm. long and .7 mm. wide as mounted. Derm membranous when immature, sclerotized at maturity; prosomal margin with a multipointed sclerotized tubercle as illustrated just anterior to the level of the anterior spiracles. A dorsal group of weakly defined membranous areas overlying the area above and between the ventral antennae. Three pairs of dorsal submarginal cicatrices, several clusters of short dorsal microducts, a few scattered long dorsal microducts, and many scattered long ventral microducts present on the prosoma as illustrated (fig. 1).

Pygidium about twice as broad as long, moderately acute apically, dorsally bearing a relatively constant pattern of sclerotized areas as illustrated (fig. 2). Perivulvar pores lacking. Four pairs of well developed pygidial lobes present (fig. 3); median pair with one faintly marked mesal notch, and one large lateral notch; second and third lobes once notched mesally, and 2 to 4 notched laterally, respectively; fourth lobe most elongated and acute of all, lacking a mesal notch and 3 notched laterally. Pygidial plates never longer than the lobes, nonfinbricate, and bearing apical pores leading into slender macroducts; 2 plates present between all lobes, and 2 present anterior to lobe 4. Three macroducts arise from between the bases of the median pair of paraphyses, 2 of these originate from the median pair of plates (fig. 3). Dorsal pygidial macroducts long and slender numbering about 20 on each side of the meson, primarily disposed in 2 rows mesad to the second and third sclerotized areas respectively; a row of 10-20 shorter marginal microducts present on each side anterior to lobe 4; ventral pygidial microducts primarily disposed in 2 irregular groups totaling about 10 microducts each on the outer one-half of the pygidium on each side. Paraphyses present, typical for the

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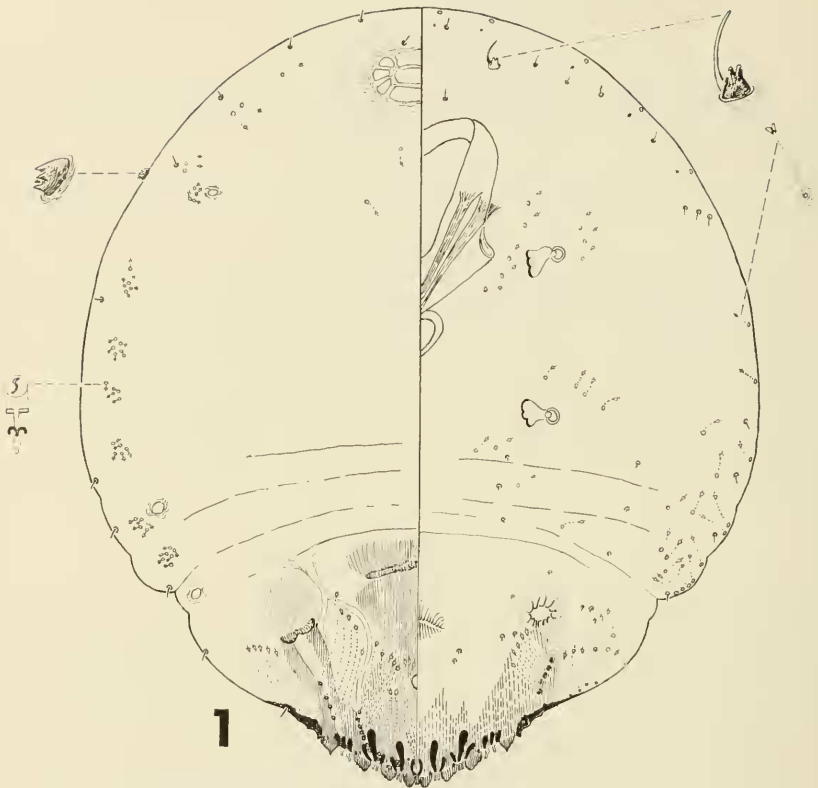
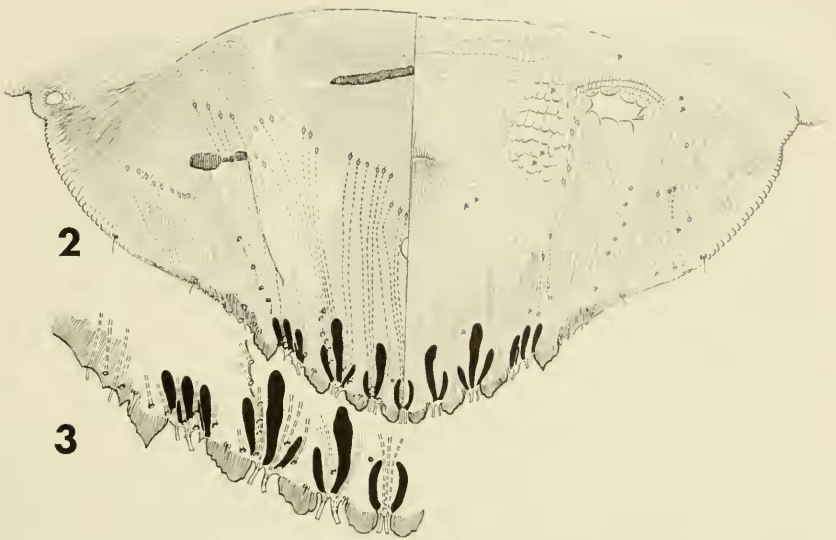


Fig. 1, *Melanaspis jamaicensis*, n. sp., entire ♀, dorsal and ventral views.

genus, strongly developed and arranged as follows: a single moderately long paraphysis slightly curved basally and apically toward the meson arising from the mesal angle of each median lobe, a long rather irregular and apically expanded paraphysis in the first interlobular space followed by a smaller one (about one-half as long) from the mesal angle of lobe 2, third space with 1 short paraphysis from the lateral angle of lobe 2, 1 moderately long paraphysis from the mesal angle of lobe 3, and the largest paraphysis present arises from between the latter pair in the second space; space 3 with 3 typical paraphyses of moderate length and 2 or 3 small ones, all somewhat variable in shape and size; several small but broad closely crowded paraphyses-like sclerotizations of variable shape present along margin anteriorly from lobe 4. Vulva situated slightly above midpygidium. Anal opening of moderate size, oval and removed from the pygidial apex a little more than one-third the length of the pygidium.

**HABIT:** Male and female scales were widely dispersed over both surfaces of the leaf section seen. Scale cover of the female circular, approximately 1.5 mm. in diameter, moderately convex; grayish in color; exuviae subcentral, black, it and cover overlain with a brownish gray film of plant tissue. Male scale cover elongate, similar in color but smaller than that of the female, exuviae near one end (fig. 4).



Figs. 2 & 3, *Melanaspis jamaicensis*, n. sp.: 2, enlargement of dorsal and ventral aspects of pygidium; 3, detailed enlargement of pygidial margin, dorsal aspect.

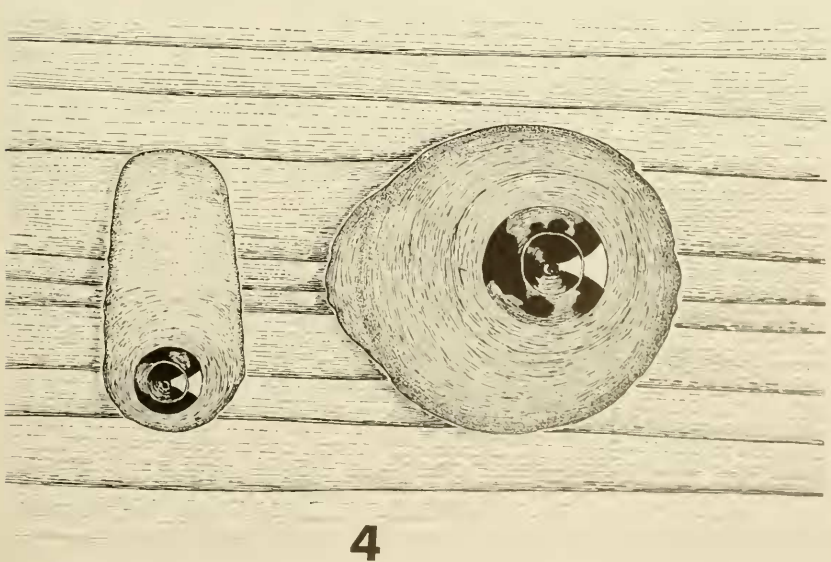


Fig. 4, *Melanaspis jamaicensis*, n. sp., scale covers, ♂ and ♀.

**HOSTS AND DISTRIBUTION:** Holotype and paratype adult females were intercepted twice in quarantine at Miami on bromeliad leaves from Jamaica. Of the eight slide mounted adult females seen, two were collected on November 22, 1966 by R. E. Cotter, and six on November 28, 1966 by J. C. Buff.

**TYPE DATA:** Holotype female is the right hand specimen on a slide containing three adult females in a horizontal row and one immature female located below the center adult. This slide, labeled Miami #42283, 28-XI-66, J. C. Buff, is in the U. S. National Museum Collection of Coccoidea, USNM 70437. One paratype female is in the collection of the Department of Entomology, University of California, Davis, three are in the collection of the Department of Entomology, University of Maryland, College Park, and one was returned to Mr. Sueo Nakahara.

**TAXONOMIC DISCUSSION:** *M. jamaicensis* is distinct from its congeners. Of the species lacking perivulvar pores it most closely resembles *M. tricuspis* Ferris, and *M. similacis* (Comstock) in general form. The prominent pointed fourth lobes, dorsal cluster of membranous areas on the anterior prosoma, and two multipointed tubercles distinguish *M. jamaicensis* from these two species.

#### ACKNOWLEDGMENTS

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